## AMENDMENTS TO THE CLAIMS:

- 1. (Original) A method of inducing apoptosis in mammalian cells expressing Apo-2 receptor comprising exposing mammalian cells expressing Apo-2 receptor to an effective amount of an Apo-2 agonist antibody.
- 2. (Original) The method of claim 1 wherein said Apo-2 agonist antibody is a monoclonal antibody.
- 3. (Original) The method of claim 1 wherein said agonist antibody is a chimeric antibody.
- 4. (Original) The method of claim 1 wherein said agonist antibody is a humanized antibody.
- 5. (Original) The method of claim 1 wherein said agonist antibody is a human antibody.
- 6. (Original) The method of claim 2 wherein said monoclonal antibody is produced by the hybridoma deposited as ATCC HB-12456.
- 7. (Original) The method of claim 2 wherein said monoclonal antibody is produced by the hybridoma deposited as ATCC HB-12534.
- 8. (Original) The method of claim 2 wherein said monoclonal antibody is produced by the hybridoma deposited as ATCC HB-12536.
- 9. (Original) The method of claim 2 wherein said monoclonal antibody is produced by the hybridoma deposited as ATCC HB-12535.
- 10. (Original) A method of treating cancer, comprising exposing mammalian cancer cells to an effective amount of an Apo-2 agonist antibody.

- 11. (Original) The method of claim 10, wherein said cancer cells are lung cancer cells.
- 12. (Original) The method of claim 10, wherein said cancer cells are colon cancer cells.
- 13. (Original) The method of claim 10, wherein said cancer cells are glioma cells.
- 14. (New) A method of inducing apoptosis in mammalian cells expressing Apo-2 receptor comprising exposing mammalian cells expressing Apo-2 receptor to an effective amount of an Apo-2 agonist antibody which (a) binds to Apo-2 polypeptide consisting of the contiguous amino acid residues 1 to 411 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell in vivo or ex vivo.
- 15. (New) The method of claim 14 wherein said Apo-2 agonist antibody is a monoclonal antibody.
- 16. (New) The method of claim 14 wherein said agonist antibody is a chimeric antibody.
- 17. (New) The method of claim 14 wherein said agonist antibody is a humanized antibody.
- 18. (New) The method of claim 14 wherein said agonist antibody is a human antibody.
- 19. (New) The method of claim 14 wherein said mammalian cells expressing Apo-2 receptor are cancer cells.
- 20. (New) The method of claim 19 wherein said cancer cells are lung cancer cells.

- 21. (New) The method of claim 19 wherein said cancer cells are colon cancer cells.
- 22. (New) The method of claim 19 wherein said cancer cells are glioma cells.
- 23. (New) A method of inducing apoptosis in mammalian cells expressing Apo-2 receptor comprising exposing mammalian cells expressing Apo-2 receptor to an effective amount of an Apo-2 agonist antibody which (a) binds to a soluble extracellular domain sequence of an Apo-2 polypeptide which consists of amino acid residues 54 to 182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell in vivo or ex vivo.
- 24. (New) The method of claim 23 wherein said Apo-2 agonist antibody is a monoclonal antibody.
- 25. (New) The method of claim 23 wherein said agonist antibody is a chimeric antibody.
- 26. (New) The method of claim 23 wherein said agonist antibody is a humanized antibody.
- 27. (New) The method of claim 23 wherein said agonist antibody is a human antibody.
- 28. (New) The method of claim 23 wherein said mammalian cells expressing Apo-2 receptor are cancer cells.
- 29. (New) The method of claim 28 wherein said cancer cells are lung cancer cells.
- 30. (New) The method of claim 28 wherein said cancer cells are colon cancer cells.

- 31. (New) The method of claim 28 wherein said cancer cells are glioma cells.
- 32. (New) A method of treating cancer, comprising exposing mammalian cancer cells to an effective amount of an Apo-2 agonist antibody which (a) binds to Apo-2 polypeptide consisting of the contiguous amino acid residues 1 to 411 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cancer cell in vivo or ex vivo.
- 33. (New) The method of claim 32 wherein said Apo-2 agonist antibody is a monoclonal antibody.
- 34. (New) The method of claim 32 wherein said agonist antibody is a chimeric antibody.
- 35. (New) The method of claim 32 wherein said agonist antibody is a humanized antibody.
- 36. (New) The method of claim 32 wherein said agonist antibody is a human antibody.
- 37. (New) The method of claim 32 wherein said mammalian cancer cells are lung cancer cells.
- 38. (New) The method of claim 32 wherein said mammalian cancer cells are colon cancer cells.
- 39. (New) The method of claim 32 wherein said mammalian cancer cells are glioma cells.
- 40. (New) A method of treating cancer, comprising exposing mammalian cancer cells to an effective amount of an Apo-2 agonist antibody which (a) binds to a soluble extracellular domain sequence of an Apo-2 polypeptide which consists of amino acid residues 54 to 182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell *in vivo* or *ex vivo*.

- 41. (New) The method of claim 40 wherein said Apo-2 agonist antibody is a monoclonal antibody.
- 42. (New) The method of claim 40 wherein said agonist antibody is a chimeric antibody.
- 43. (New) The method of claim 40 wherein said agonist antibody is a humanized antibody.
- 44. (New) The method of claim 40 wherein said agonist antibody is a human antibody.
- 45. (New) The method of claim 40 wherein said mammalian cancer cells are lung cancer cells.
- 46. (New) The method of claim 40 wherein said mammalian cancer cells are colon cancer cells.
- 47. (New) The method of claim 40 wherein said mammalian cancer cells are glioma cells.